Greenforest Incorporated
Consulting Arborist

February 10, 2016

Greg Nelson
William E Buchan, Inc.
2630 116th Ave NE, #100
Bellevue, WA 98004

RE: Amended Arborist Report for Orler Project, 12703 72nd Ave NE 98034

Dear Mr. Nelson:

You contracted my services as a consulting arborist. My assignment is to inspect the significant trees at the above referenced site (TPN 4055700930). The purpose of this report is to establish the condition of the significant trees to satisfy City of Kirkland permit submittal requirements.

I received a tree survey from Blueline dated 11/30/15. I visited the site 12/9/15 and visually inspected the trees indicated on the survey, which are the subject of this report.

[This report is amended from my 1/20/16 report: It includes an inventory establishing Removed, Impacted and Retained trees; tree density credit calculations; and limits of disturbance.]

The site is 2.69 acres in size with a western aspect. The eastern portion is relatively flat with a single-family residence. The landscape is mature, and is dominated by three mature groves of native conifers: cedar, fir and hemlock. Smaller ornamental trees surround the house. Except for the open areas of lawn, groundcovers include native salal, swordfern, blackberries, and naturalized English holly and English laurel. Foundation plantings adjacent to the house include rhododendron, camellia, hydrangea, azalea and bamboo. Where shade is dense, the ground is bare, with minimal scattered annual grasses.

Shrub and groundcover species are mapped on an annotated survey in Attachment 5.

THREE MATURE TREE GROVES

Two groves stand at the east end of the project, and border the street ROW. One grove (currently delineated by the existing circular driveway) will be completely removed. A second grove, at the NE corner of the site, will be heavily impacted. Five trees within this stand will be preserved (3 trees impacted and 2 retained).

A third grove stands south of the proposed development, near the top of the existing slope. No trees within this stand will be impacted by the proposed development.

TREE INSPECTION – Tree Health, Condition and Viability

I visually inspected each surveyed tree from the ground, and rated both tree health and structure. A tree's structure is distinct from its health. This inspection identifies what is visible with both. Structure is the way the tree is put together or constructed, and identifying obvious defects can be helpful in determining if a tree is predisposed to failure. Tree health assesses disease, insect infestation and old age.

The trees on the slope, though not surveyed, are included in this report. I walked the length of the parcel and tallied the viable significant trees. I recorded the species and DBH of all the trees 6" DBH and greater. These trees are to be used in the tree density calculations for this project, and are reported (separately from the surveyed trees) in an attachment.

I located 2 trees of significant size not shown on the original survey. They are included in this report as trees numbered A and B in the following inventory. Two trees also stand within the ROW at the north end of the project and are included in the attached inventory.

No invasive procedures were performed on any trees. The results of this inspection are based on what was visible at the time of the inspection.

Attachment 4 summarizes my inspection results for the surveyed trees with an inventory, and provides the following information for each tree:

Tree number as shown on tag in the field.

DBH Stem diameter in inches measured 4.5 feet from the ground.

Tree Density Credits Available credits for viable on-site trees.

Tree Species Common name.

Dripline Radius Average branch extension from the trunk as radius in feet.

Structure and Health rating ('1' indicates no visible health-related problems or structural defects, '2' indicates minor visible problems or defects that may require attention if the tree is retained, and '3' indicates significant visible problems or defects and tree removal is recommended.

Proposed Action Indicates if tree is to be retained (and protected), impacted (to be preserved and protected, if possible, and not designated as a 'retained tree'), or tree will be removed.

Viability a determination by the arborist whether the tree is viable for retention.

Visible defects Obvious structural defects or diseases visible at time of inspection, which includes:

Asymmetric canopy– the tree has an asymmetric canopy from space and light competition from adjacent trees.
Decline – Tree is in an obvious state of declining vigor/vitality.
Diseased – foliage and trunk/stems are diseased.
Disease center – soil-borne fungal infection site.
Double leader – the tree has multiple stem attachments, which may require maintenance or monitoring over time.
Ivy - Dense ivy prevents a thorough inspection, and other defects may be present.
Multiple leaders - the tree has multiple stem attachments, which may lead to tree failure and require maintenance or monitoring over time.
Thinning Canopy – low foliage density indicated infection/declining health.
Suppressed – tree crowded by larger adjacent trees; with defective structure and/or low vigor. Retain tree only as a grove tree, not stand-alone.
Topped – the tree is previously topped and has poor structure and/or stem decay.
Tree tipped – Trunk has significant lean from vertical from previous root failure.
Tree suppressed - Tree is suppressed by adjacent tree canopies.
Trunk decay - Wood decay is visible in the trunk.

DISEASE CENTER

During my fieldwork, I observed signs and symptoms of a root rot pathogen within this third, south grove, including trees with fungal conks on trunks, thinning and chlorotic foliage, low shoot vigor, and previously windthrown trees with decayed structural roots. All the affected trees are Douglas-firs, and include 7589, 7590, 7591, 7598, 7599, 7605, 7606, 7607, and A. (See Attachment 6.)

TREE TALLY

The trees on the sloped western portion of the parcel are not surveyed. This area remains natural with native vegetation: It slopes sharply down toward an existing stream. Within this area, tree species include alder, maple, hemlock, fir and cedar, mid-story species include madrone, Indian plum and elderberry; and ground covers include salal, swordfern, nettle, red huckleberry, Oregon grape, gooseberry, ivy, and also herbaceous species and grasses.

Significant viable trees on this sloped area to the south are tallied to establish tree density credits for this non-developable portion of the parcel. The results of the tally are summarized in Attachment 2. Trees are listed by species, and sorted by size (DBH), with assigned tree density credits. There are 105 (non-surveyed) significant viable trees on the sloped area, with a total of 462 available tree density credits.

REQUIRED TREE DENSITY & AVAILABLE TREE DENSITY CREDIT

Required tree density is calculated by multiplying the acreage of the lot by 30, which equals 81. (2.69 X 30 = 80.7, or 81 rounded)

Available tree density credit equals 685: 462 from tree tally (See Attachment 2) and 223 from the surveyed retained trees (See Attachment 4). Credits are assigned for only viable on-site trees, as tree density calculations do not apply to public trees.

The total available tree density credit equals 685.

Because the available tree density credit surpasses the required credit, no supplemental trees are needed to meet the density requirement.

LIMITS OF DISTURBANCE

Limits of Disturbance (LOD) are calculated for all the retained *significant* and *impacted* trees within the buildable portion of the project. They are listed below as radii in feet from the trunk for the side of the tree to be impacted by construction. They are determined using rootplate [1] and trunk diameter,[2,3], proposed and previous site clearing, and ISA Best Management Practices.[4] These are the minimum distances from the trees for any soil disturbance, and represent the area to be protected during construction. These LOD are malleable and may be adjusted during the design and

[1] Coder, Kim D. 2005. *Tree Biomechanics Series*. University of Georgia School of Forest Resources.
[2] Smiley, E. Thomas, Ph. D. *Assessing the Failure Potential of Tree Roots, Shade Tree Technical Report*. Bartlett Tree Research Laboratories.
[3] Fite, Kelby and E. Thomas Smiley. 2009. *Managing Trees During construction; Part Two*. Arborist News. ISA.
[4] Companion publication to the ANSI A300 Series, Part 5: Managing Trees During Construction. 2008. ISA.

construction process. The LOD for the three *Impacted* trees (on the development side of the tree) are very narrow, but are so to accommodate the proposed construction. Structural roots may be exposed and/or injured during the required excavation. An assessment by the project arborist at that time will address impacts to these trees, and make recommendations for removal if necessary.

The following table lists the limits of disturbance for certain surveyed retained trees for four cardinal sides of most trees. Where cells are blank, the tree is likely already protected within the LOD of an adjacent tree.

Limits of Disturbance for Retained and Impacted Trees.

Tree No.	DBH	Tree Species	Dripline	Retained or Impacted	LOD			
					North	East	South	West
7478	13”	Douglas-fir	12’	Impacted	ND	12’	6’	12’
7480	18	Douglas-fir	12	Impacted	ND	12	7	12
7488	24	Douglas-fir	14	Retained	ND	14	12	14
7490	24	Douglas-fir	16	Impacted	ND	16	9	16
7544	36	Douglas-fir	18	Retained	ND	18	16	18
7559	12	Magnolia	14	Retained	8’	14	PL	14
7565	8	Weeping birch	7	Retained	7	7	PL	7
7568	36	Douglas-fir	18	Retained	18	16	PL	ND
7577	6	English holly	10	Retained	10	10	10	ND
7592	36	Douglas-fir	20	Retained	20	20	20	ND
7595	24	Douglas-fir	16	Retained	16	16	16	ND
7596	24	Douglas-fir	16	Retained	16	ND	ND	16
7600	28	Douglas-fir	18	Retained	18	18	ND	ND

TREE PROTECTIVE FENCING

The attached grading plan shows the recommended contiguous limits of disturbance for groups of retained surveyed trees. These limits also represent the location of required tree protective fencing. Fencing shall be installed prior to any site clearing or demolition.

Minimum six (6) foot temporary chain-link fence shall be installed at the driplines of all retained trees or at the limits of disturbance as described above. Fencing shall completely encircle the retained trees. Install fence posts using pier block only. A City planner must approve any modifications to the fencing material and location. Fencing signage as detailed (See Attachment 3) must be posted every fifteen (15) feet along the fencing.

No stockpiling of materials, vehicular or pedestrian traffic, material storage or use of equipment or machinery shall be allowed within the protective fencing. Fencing shall not be moved or removed unless approved by a City planner. Any work, activity or soil disturbance within the protection fencing, or critical root zone, shall be reviewed, approved and monitored by the project arborist.

Sincerely,

GreenForest, Inc.

By Favero Greenforest, M.S.

ISA Certified Arborist # PN -0143A
ASCA Registered Consulting Arborist® #379
ISA Tree Risk Assessment Qualified

Favero Greenforest

Digitally signed by Favero Greenforest
DN: cn=Favero Greenforest, o, ou, email=greenforestinc@mindspring.com, c=US
Date: 2016.02.11 16:18:00 -08'00'

Attachments:

1. Assumptions and Limiting Conditions
2. Talley of Significant Trees on Slope
3. Tree Protection Graphic
4. Significant Tree Inventory
5. Native Vegetation Map
6. Disease Center Photographs

Attachment No. 1 - Assumptions & Limiting Conditions

1) A field examination of the site was made 12/09/2015. My observations and conclusions are as of that date.

2) Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/arborist can neither guarantee nor be responsible for the accuracy of information provided by others.

3) I am not a qualified land surveyor. Reasonable care was used to match the trees indicated on the sheets with those growing in the field.

4) Construction activities can significantly affect the condition of retained trees. All retained trees should be inspected after construction is completed, and then inspected regularly as part of routine maintenance.

5) Unless stated other wise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied that problems or deficiencies of the subject tree may not arise in the future.

6) All trees possess the risk of failure. Trees can fail at any time, with or without obvious defects, and with or without applied stress. A complete evaluation of the potential for this (a) tree to fail requires excavation and examination of the base of the subject tree. Permission of the current property owner must be obtained before this work can be undertaken and the hazard evaluation completed.

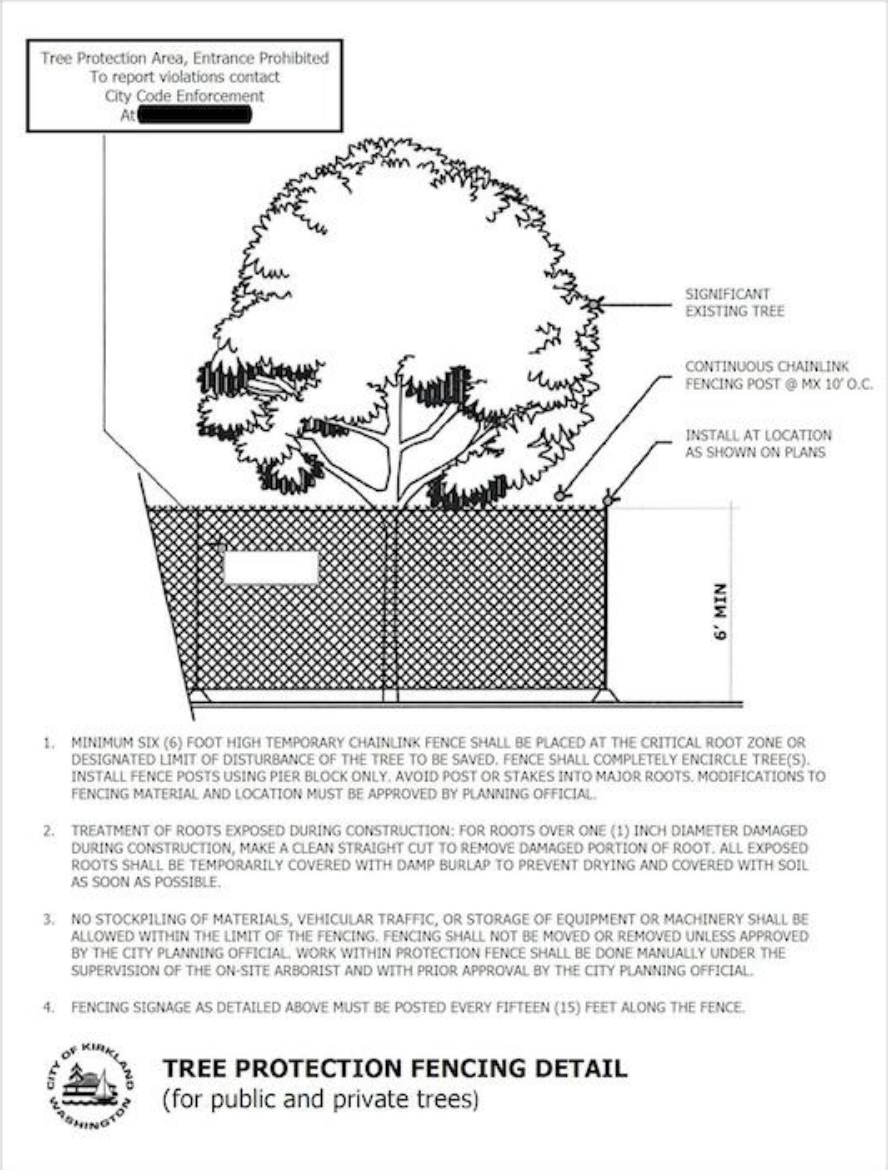
7) The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made.

8) This report and any values/opinions expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

Attachment No. 2 – Talley of Significant Trees on Slope (With Available Tree Density Credit)

Tree Count	Alder	Credit	Cotton-wood	Credit	Madrone	Credit	Maple	Credit	Fir	Credit	Cedar	Credit	Hawthorn	Credit	
1	8"	**1**	16"	**4**	10"	**1**	6"	**1**	8"	**1**	8"	**1**	10"	**1**	
2	8	**1**			12	**2**	6	**1**	10	**1**	8	**1**			
3	8	**1**			16	**6**	10	**1**	10	**1**	10	**1**			
4	6	**1**			16	**6**	12	**2**	10	**1**	10	**1**			
5	6	**1**			18	**5**	16	**4**	14	**6**	10	**1**			
6	8	**1**			22	**7**	16	**4**	14	**6**	12	**2**			
7	8	**1**			28	**10**	18	**5**	16	**4**	12	**2**			
8	10	**1**					18	**5**	16	**4**	12	**2**			
9	10	**1**					18	**5**	16	**4**	12	**2**			
10	10	**1**					20	**6**	16	**4**	12	**2**			
11	12	**2**					20	**6**	16	**4**	12	**2**			
12	12	**2**					20	**6**	16	**4**	14	**3**			
13	12	**2**					22	**7**	18	**5**	14	**3**			
14	14	**6**					24	**8**	18	**5**	14	**3**			
15	14	**6**					28	**10**	18	**5**	16	**4**			
16	14	**6**					10,10	**1**	18	**5**	16	**4**			
17	14	**6**					18,20,22	**6**	20	**6**	24	**8**			
18	15	**6**					20,12	**4**	20	**6**	26	**9**			
19	15	**6**					20,20	**6**	20	**6**					
20	16	**4**					24,24,24	**8**	20	**6**					
21	16	**4**							20	**6**					
22	18	**5**							22	**7**					
23	18	**5**							22	**7**					
24	18	**5**							22	**7**					
25	18	**5**							24	**8**					
26	18	**5**							24	**8**					
27									24	**8**					
28									26	**9**					
29									28	**10**					
30									28	**10**					
31									30	**11**					
32									34	**13**					
Tree Ct.	*26*		*1*		*7*		*20*		*32*		*18*		*1*		*105*
Credits		**85**		**4**		**37**		**96**		**188**		**51**		**1**	**462**

Attachment No. 3 – Tree Protection Graphic



1. MINIMUM SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS. MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.

2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING AND COVERED WITH SOIL AS SOON AS POSSIBLE.

3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.

4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE.

CITY OF KIRKLAND WASHINGTON

TREE PROTECTION FENCING DETAIL
(for public and private trees)

Attachment No. 3 – Significant Tree Inventory

Tree No.	DBH	Tree Density Credits	Significant Tree Species	Dripline Radius	Health	Structure	Remove, Impacted or Retained	Viable Tree?	Visible Defects
7438	20”	0	Norway spruce	14’	1	2	Remove	Yes	Oozing resin
7439	36	0	Blue atlas cedar	25	1	1	Remove	Yes	
7440	31	0	Western hemlock	20	1	2	Remove	Yes	Asymmetric canopy
7441	36	0	Western red-cedar	18	1	2	Remove	Yes	Asymmetric canopy
7442	6	0	Western red-cedar	8	1	2	Remove	Yes	Suppressed
7443	36	0	Western red-cedar	16	1	2	Remove	Yes	Asymmetric canopy
7444	6,6	0	European birch	8	2	3	Remove		ROW. Topped, stump sprout
7455	6,8,9	0	Japanese maple	16	1	1	Remove	Yes	
7467	46	0	Western red-cedar	20	1	1	Remove	Yes	
7468	14	0	Norway spruce	4	1	1	Remove	Yes	
7469	8	0	Pacific madrone	10	1	2	Remove	Yes	Lean, ivy
7470	10	0	Pacific madrone	10	1	1	Remove	Yes	Ivy
7472	6	0	Pacific dogwood	8	1	2	Remove	Yes	Asymmetric canopy
7473	40	0	Douglas-fir	20	1	2	Remove	Yes	Thin canopy
7474	30	0	Douglas-fir	18	1	2	Remove	Yes	Ivy
7475	42	0	Douglas-fir	20	1	1	Remove	Yes	Ivy
7476	44	0	Western red-cedar	20	1	1	Remove	Yes	Ivy
7477	35	0	Western red-cedar	16	1	1	Remove	Yes	
7478	13	2	Douglas-fir	12	1	1	Impacted	Yes	
7480	18	5	Douglas-fir	12	1	1	Impacted	Yes	
7483	34	0	Western red-cedar	14	1	1	Remove	Yes	Ivy

Tree No.	DBH	Tree Density Credits	Significant Tree Species	Dripline Radius	Health	Structure	Remove, Impacted or Retained	Viable Tree?	Visible Defects
7484	30	0	Western red-cedar	16	1	2	Remove	Yes	Asymmetric, ivy covering trunk
7485	46	0	Western red-cedar	18	1	2	Remove	Yes	Asymmetric, ivy
7486	46	0	Western red-cedar	20	1	1	Remove	Yes	Ivy
7487	42	0	Western red-cedar	18	1	1	Remove	Yes	Ivy
7488	24	8	Douglas-fir	14	1	1	Retained	Yes	
7489	25	0	Douglas-fir	16	3	1	Remove	No	Thinning canopy
7490	24	8	Douglas-fir	16	1	1	Impacted	Yes	
7503	7	0	Camellia	8	1	2	Remove	Yes	Topped
7529	8	0	Alaska weeping cedar	8	1	1	Remove	Yes	
7544	36	14	Douglas-fir	18	1	2	Retained	Yes	Asymmetric canopy
7557	54	0	Western red-cedar	20	1	2	Remove	Yes	Multiple leader
7558	54	0	Western red-cedar	25	1	2	Remove	Yes	Multiple leader
7559	12	2	Magnolia (evergreen)	14	1	1	Retained	Yes	
7561	13	0	Bigleaf maple	12	2	3	Remove	No	Topped, decline
7562	13	0	Bigleaf maple	12	2	3	Remove	No	Topped, decline
7565	8	1	Weeping birch	7	1	2	Retained	Yes	Suppressed
7568	36	14	Douglas-fir	18	1	1	Retained	Yes	
7577	6	1	English holly	10	1	1	Retained	Yes	
7578	15	3	Douglas-fir	16	1	2	Retained	Yes	Asymmetric canopy
7579	24	8	Douglas-fir	16	1	1	Retained	Yes	
7580	12	2	Douglas-fir	14	1	2	Retained	Yes	Suppressed
7581	32	12	Douglas-fir	20	1	1	Retained	Yes	
7584	12,16	3	Douglas-fir	14	1	2	Retained	Yes	Double leader

Tree No.	DBH	Tree Density Credits	Significant Tree Species	Dripline Radius	Health	Structure	Remove, Impacted or Retained	Viable Tree?	Visible Defects
7589	28	0	Douglas-fir	16	3	1	Remove	No	Disease center
7590	14	0	Douglas-fir	12	3	2	Remove	No	Suppressed, disease center
7591	26	0	Douglas-fir	12	3	3	Remove	No	Fungal conks on trunk, disease center
7592	36	14	Douglas-fir	20	1	1	Retained	Yes	
7593	42	0	Western red-cedar	20	1	1	Remove	Yes	
7594	28	0	Douglas-fir	16	3	2	Remove	No	Thin canopy, disease center
7595	24	8	Douglas-fir	16	1	2	Retained	Yes	Asymmetric canopy
7596	24	8	Douglas-fir	16	1	2	Retained	Yes	Asymmetric canopy
7597	24	8	Western red-cedar	16	1	1	Retained	Yes	
7598	20	0	Douglas-fir	10	3	2	Remove	No	Thin canopy, disease center
7599	12	0	Douglas-fir	8	3	2	Remove	No	Thin canopy, disease center
7600	28	10	Douglas-fir	18	1	1	Retained	Yes	
7601	14	3	Douglas-fir	12	1	1	Retained	Yes	
7602	24	8	Douglas-fir	16	1	1	Retained	Yes	
7603	24	8	Douglas-fir	16	1	2	Retained	Yes	Thin canopy
7604	34	13	Douglas-fir	16	1	1	Retained	Yes	
7605	12	0	Douglas-fir	10	3	2	Remove	No	Oozing resin, disease center
7606	22	0	Douglas-fir	14	3	1	Remove	No	Disease center
7607	32	0	Douglas-fir	14	3	3	Remove	No	Thin canopy, trunk tipped, disease center
7612	6	0	Autumnalis cherry	6	2	3	Remove	No	Brown rot disease, decline
7634	6,10	1	Bigleaf maple	14	1	2	Retained	Yes	Double leader

Tree No.	DBH	Tree Density Credits	Significant Tree Species	Dripline Radius	Health	Structure	Remove, Impacted or Retained	Viable Tree?	Visible Defects
7635	16	4	Douglas-fir	14	1	1	Retained	Yes	
7636	18	5	Douglas-fir	12	1	1	Retained	Yes	
7639	22	7	Douglas-fir	14	1	1	Retained	Yes	
7640	26	9	Douglas-fir	14	1	1	Retained	Yes	
7642	10	1	Bigleaf maple	14	1	3	Retained	No	Trunk decay
7643	30	11	Douglas-fir	14	1	1	Retained	Yes	
7644	32	12	Douglas-fir	18	1	1	Retained	Yes	
7645	6	1	Bigleaf maple	14	1	1	Retained	Yes	
7646	12	0	Bigleaf maple	14	1	3	Retained	No	Lean, trunk decay
7647	8	1	Bigleaf maple	14	1	1	Retained	Yes	
17417	8	0	Pacific dogwood	14	2	1	Remove		ROW. Diseased
A	30	0	Douglas-fir	12	3	2	Remove	No	Thin canopy, disease center
B	24	8	Douglas-fir	16	1	1	Retained	Yes	
		223							

Greg Nelson, William E Buchan, Inc.
RE: Amended Arborist Report for Orler Project - 12703 72nd Ave NE 98034
February 10, 2016
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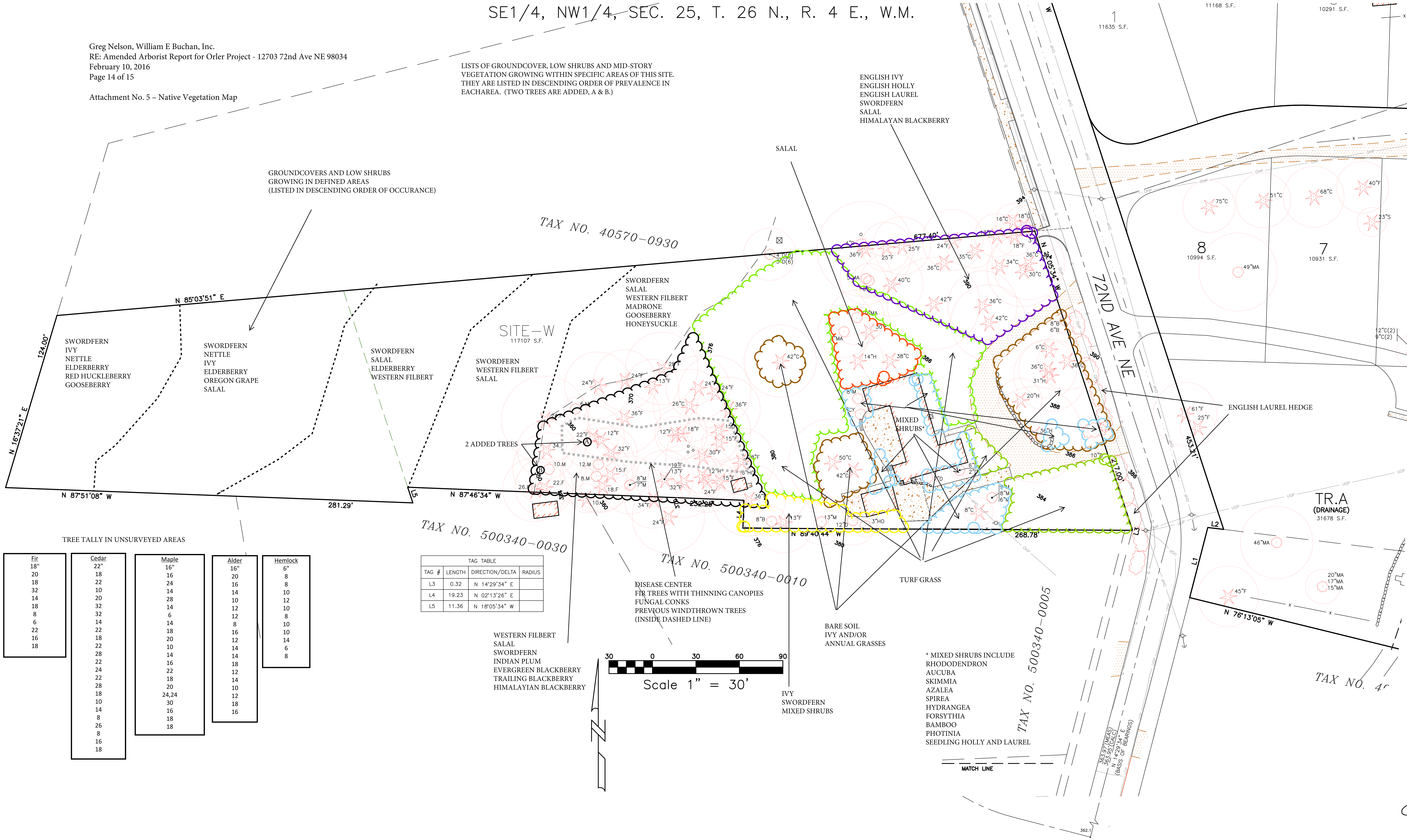
Attachment No. 5 – Native Vegetation Map



SE1/4, NW1/4, SEC. 25, T. 26 N., R. 4 E., W.M.
LISTS OF GROUNDCOVER, LOW SHRUBS AND MID-STORY VEGETATION GROWING WITHIN SPECIFIC AREAS OF THIS SITE. THEY ARE LISTED IN DESCENDING ORDER OF PREVALENCE IN EACHAREA. (TWO TREES ARE ADDED, A & B.)
GROUNDCOVERS AND LOW SHRUBS GROWING IN DEFINED AREAS (LISTED IN DESCENDING ORDER OF OCCURANCE)
SWORDFERN IVY NETTLE ELDERBERRY RED HUCKLEBERRY GOOSEBERRY
SWORDFERN NETTLE IVY ELDERBERRY OREGON GRAPE SALAL
SWORDFERN SALAL ELDERBERRY WESTERN FILBERT
SWORDFERN WESTERN FILBERT SALAL
SWORDFERN SALAL WESTERN FILBERT MADRONE GOOSEBERRY HONEYSUCKLE
SALAL
ENGLISH IVY ENGLISH HOLLY ENGLISH LAUREL SWORDFERN SALAL HIMALAYAN BLACKBERRY
ENGLISH LAUREL HEDGE
2 ADDED TREES
MIXED SHRUBS*
SITE-W
117107 S.F.
TAX NO. 40570-0930
TAX NO. 500340-0030
TAX NO. 500340-0010
TAX NO. 500340-0005
72ND AVE NE
TR.A (DRAINAGE) 31678 S.F.
N 85°03'51" E
N 16°37'21" E
124.00'
N 87°51'08" W
281.29'
N 87°46'34" W
N 89°40'44" W
268.78'
677.40'
453.21'
217.00'
N 76°13'05" W
DISEASE CENTER FIR TREES WITH THINNING CANOPIES FUNGAL CONKS PREVIOUS WINDTHROWN TREES (INSIDE DASHED LINE)
WESTERN FILBERT SALAL SWORDFERN INDIAN PLUM EVERGREEN BLACKBERRY TRAILING BLACKBERRY HIMALAYIAN BLACKBERRY
IVY SWORDFERN MIXED SHRUBS
BARE SOIL IVY AND/OR ANNUAL GRASSES
TURF GRASS
* MIXED SHRUBS INCLUDE RHODODENDRON AUCUBA SKIMMIA AZALEA SPIREA HYDRANGEA FORSYTHIA BAMBOO PHOTINIA SEEDLING HOLLY AND LAUREL
Scale 1" = 30'
MATCH LINE

TREE TALLY IN UNSURVEYED AREAS

Fir	Cedar	Maple	Alder	Hemlock
18"	22"	16"	16"	6"
20	18	16	20	8
18	22	24	16	8
32	10	14	14	10
14	20	28	10	12
18	32	14	12	10
8	32	6	12	8
6	14	14	8	10
22	22	18	16	10
16	18	20	12	14
18	22	10	14	6
	28	14	14	8
	22	16	18	
	24	22	12	
	22	18	14	
	28	20	10	
	18	24,24	12	
	10	30	18	
	14	16	16	
	8	18		
	26	18		
	8			
	16			
	18			

TAG TABLE

TAG #	LENGTH	DIRECTION/DELTA	RADIUS
L3	0.32	N 14°29'34" E	
L4	19.23	N 02°13'26" E	
L5	11.36	N 18°05'34" W	

Mead Gilman & Assoc.
Professional Land Surveyors
P.O. BOX 289, WOODINVILLE, WA 98072
PHONE: (425) 486-1252 FAX: (425) 486-6108
MG & A

WILLIAM BUCHAN HOMES
2630 116TH AVE NE NO. 100, BELLEVUE, WA 98004

ORLER

BOUNDARY & TOPOGRAPHIC SURVEY

EDWARD D. ANDERSON STATE OF WASHINGTON 32434 REGISTERED PROFESSIONAL LAND SURVEYOR
12/1/15

DRAWN BY: LSD/EDA
REV. BY:
DATE: 11-30-15
SCALE: 1" = 30'
DRAWING NO. 15165
SHEET 1 OF 1

Attachment No. 6 – Disease Center Images (Showing fungal conks, previous windthrow and thin canopies.)